

# Strategic Plan 2000-2002 Progress Report

## October 2001

The development of the Strategic Plan for the Elimination of Tuberculosis (TB) in Wisconsin began in 1998. It was created as a guide that would direct the Wisconsin TB Program and TB treatment in Wisconsin toward the achievement of appropriate goals in TB care and eventually TB elimination. This process and this document continue to evolve much like the care of TB does in today's world. This update gives you a broad view of the current status of this effort and the progress made toward achievement of goals thus far. The strategic plan for 2000 – 2002 was distributed in the spring of 2001. This Progress Report covers the first 18 months of the plan.

Taking stock of the status of Wisconsin's progress toward the goals of the strategic plan will help revise the plan for the continued improvement of the care of persons with TB in Wisconsin. In lieu of listing all action steps under each objective, a summary of the progress made on action steps for each goal and objective is listed.

### **Improving Existing Surveillance Methods**

#### **Goal 1: Identify tuberculosis (TB) suspects early**

##### *Objective 1:*

*At least 95% of persons reported with TB disease or suspect TB will have been identified and referred for tuberculosis related medical evaluation within 72 hours of initial contact with a health care provider or any other provider identified.*

##### **Progress to date:**

In May 2001, the revised TB Suspect Case Data form was distributed to local health departments (LHDs) via the Division of Public Health Communicable Disease Spring Seminars and the Wisconsin Tuberculosis Program web page. It was also included in the Accessing Services and Resources for Persons with Suspect or Active Tuberculosis Disease or Latent TB Infection (LTBI) guideline. Data elements from the form are being collected on all 2001 TB cases. The data for 2001 will be analyzed by April 2002. Information from the data review will be used to direct program activities in relation to timely reporting and educating area providers.

On March 23, 2000 the American Lung Association of Wisconsin (ALA/W) sponsored a TB education seminar for physicians and nurses. Approximately 193 people attended of which 22% of the participants were physicians and 68% were nurses (RNs and LPNs). Participants evaluated the program as very good to excellent (94%).

The Wisconsin TB Program has begun discussing future collaboration with the ALA/W in relation to TB education and advocacy for business, governmental leaders and physicians. In June of 2001 the director and health educator of the Wisconsin TB

Program participated in the “Hill Day” sponsored by the American Lung Association and the National TB Controllers Association in Washington D.C. This event coincided with the introduction of two TB related bills in the Senate and the House. During this event, Wisconsin TB Program staff met with members of congress to provide them with education on Wisconsin specific TB data.

**Goal 2: Ensure immediate reporting of each TB case and suspect case to the local health officer or the Wisconsin TB Program**

*Objective 1:*

*The local health officer or the Wisconsin TB Program will receive at least 95% of all TB suspect case reports within 24 hours when one or more of the following indicators are present:*

- *a prescription is written for two or more tuberculosis drugs to be taken for period of more than 2 months*
- *clinical signs and symptoms (such as a chest radiograph) suggest tuberculosis disease or*
- *a smear is positive for acid fast bacilli (AFB) in a patient with no previous history of a non-tuberculosis mycobacteria*

**Progress to date:**

Reporting data collected from the Suspect Case Data Form on 2001 cases will be analyzed by April 2002 to assess progress on this objective.

The educational teleconference network (ETN) conducted in May 2001 on the Accessing Services best practice guideline included a review of the Communicable Disease Report Form (DPH 4151), information on reporting criteria, and a worksheet for determining whether or not a patient’s condition is reportable.

*Objective 2:*

*The Wisconsin TB Program, using the Centers for Disease Control and Prevention (CDC) reporting system, will report all newly diagnosed cases of TB to CDC. There will be at least 95% completeness for CDC selected variables.*

**Progress to date:**

For TB patients counted during year 2000, there was 96% completeness for selected variables on part one of the Report of Verified Case of Tuberculosis (RVCT).

*Objective 3:*

*The Wisconsin TB Program and LHDs will actively work with infection control practitioners (ICPs) in Wisconsin health care facilities to promote the most current TB prevention/education standards within their facilities and in their shared communities.*

**Progress to date:**

In 2001, TB Nurse Consultant, June Doyle, was designated as the key contact at the state level for ICPs regarding infection control and tuberculosis. She has presented:

- The Strategic Plan to southern regional Association of Practitioners in Infection Control and Epidemiology (APIC) chapter in 2000,
- A TB update at the southeastern regional APIC chapter in 2000
- The Strategic Plan and other TB education materials and guidelines to the Statewide APIC Convention in May of 2001.

The Wisconsin TB Program provides ongoing consultation to ICPs. In each guideline for effective practice produced thus far, emphasis was placed on enhanced communication, technical assistance and education between local health departments (LHDs) and local ICPs. At the Communicable Disease Spring Seminars and the four ETN training sessions on the guidelines for effective practice, TB program staff have also emphasized the important relationship between ICPs and LHDs.

### **Goal 3: Identify any outbreak or any other unusual occurrence of TB disease in Wisconsin**

#### *Objective 1:*

*The Wisconsin State Laboratory of Hygiene (WSLH) with the cooperation of Mycobacteriology Laboratory Network (MLN) will perform DNA fingerprinting on 95% of initial TB isolates within 4 months of receipt.*

#### **Progress to date:**

All new TB isolates from 2000 and all new TB isolates from 2001 to date that were identified at other laboratories have been received at WSLH. Labs inoculate new isolates to solid media and send them to WSLH once obvious growth is present, which usually takes a little more than 10 days. All isolates have been received within 14-21 days of identification except for several which were identified at out of state labs. This time frame is now considered an acceptable goal. The earlier target of 10 days has been determined unachievable at this time.

WSLH sent a microbiologist and the Director of Bacteriology to CDC for a week of training on August 13, 2001 to learn how to perform DNA fingerprinting (spoligotyping). WSLH plans to have the test running by November 2001. WSLH is on target for having the capability of routinely performing spoligotyping on all new TB isolates by January 1, 2002.

#### *Objective 2:*

*All unusual occurrences of TB disease in Wisconsin will be investigated using all available resources to define epidemiological and relational links.*

#### **Progress to date:**

The Wisconsin TB Program is waiting for the results from the preventable case analysis and spoligotyping results to define “unusual occurrences.” Information collected and analyzed from the TB Suspect Case Data form will also assist in defining “unusual occurrence.”

#### **Goal 4: Target surveillance for TB infection and disease**

##### *Objective 1:*

*All diagnosed cases of active tuberculosis disease will be reported to the Wisconsin TB Program.*

##### **Progress to date:**

Monthly registry reviews continue to be conducted with the HIV surveillance staff to ensure completeness of reporting of HIV and TB co-infected patients.

WSLH has reviewed their record of known positive TB cultures in Wisconsin residents as reported by the MLN with the Wisconsin TB Program's registry for 2000 and 2001 (to date).

##### *Objective 2:*

*At least 80 % of people receiving skin testing by LHDs will have an identified medical or population risk factor.*

##### **Progress to date:**

The DPH 4000 form "Request for Anti-Tuberculosis Medications" was revised in July of 2000. The form includes fields that enable the Wisconsin TB Program to collect data regarding a client's risk factors for TB. Detailed instruction were included with the revision. The form was distributed to all local health departments during 2000 and included in the Accessing Services guideline in 2001. The data collected during 2001 will provide the first step in implementation of the Aggregate Report for Tuberculosis Program Evaluation (ARPE). The revised form also reflects changes made in 2000 nationally on interpreting skin test results, testing priorities and the treatment of LTBI. Analysis of data completeness will determine which additional training steps are necessary.

The Wisconsin TB Program began distribution to LHDs of a simple-to-use computerized database for evaluation of targeted testing and treatment of LTBI activities. Two LHDs are currently using the database for tracking their targeted testing and treatment of LTBI activities. Analysis of the data entered will be provided by January 2002. Two additional health departments have expressed willingness to pilot the database in the fall of 2001.

##### *Objective 3:*

*LHDs will conduct appropriate surveillance for TB disease and latent TB infection (LTBI).*

##### **Progress to date:**

During the June ETN, emphasis was placed on this objective and action step – examples of how this could be interpreted were given to the listening audience.

The Wisconsin TB Program will develop a Community Prevention and Control guideline by the summer of 2003. This guideline will include direction on targeted TB testing and TB Elimination.

## **Improving Disease Treatment Methods**

**Goal 5: Active TB cases in Wisconsin will be treated with appropriate and adequate therapy based on the American Thoracic Society (ATS) and CDC guidelines.**

### *Objective 1:*

*At least 90% of all individuals with reported cases of tuberculosis disease will complete an ATS/CDC recommended regimen of TB drug therapy within 12 months.*

### **Progress to date:**

The Accessing Services guideline incorporated information on obtaining approved medications through the Wisconsin TB Program. The guideline was distributed to all LHDs in May of 2001. The ETNs that covered this information took place in May and June of 2001.

A guideline on directly observed therapy (DOT) will be complete in the fall of 2001. It will also include information on ensuring adherence to therapy. Information on reviewing cases with the Wisconsin TB Program was included in the Accessing Services guideline distributed in May 2001. Quality assurance protocols for TB cases will be developed and distributed to LHDs in the fall of 2002.

At this time it is not possible to determine how many of the LHDs have adopted the guidelines that have been produced. While it is the expectation that LHDs adopt the guidelines, the Wisconsin TB Program has received information from LHDs that this process is occurring very slowly for a variety of reasons. The TB Nurse Consultant has scheduled onsite meetings with some LHDs to assist them in the implementation process. Throughout the Strategic Plan where it is stated that LHDs will establish standard protocols for effective practice related to a given guideline 6 months after distribution can no longer be considered realistic. Until a method for determining how many LHDs have adopted any given guideline, the Wisconsin TB Program will not be able to measure the LHD guideline implementation process.

The Wisconsin TB Program continues to work closely with LHDs in processing medication requests that are filled at the local level for TB suspects, confirmed cases and high risk contacts. The Accessing Services guideline outlined the process for filling prescriptions locally. As some LHDs have very few TB cases, a significant amount of guidance from the Wisconsin TB Program is still needed for some LHDs.

Medication requests that deviate from standard protocols are reviewed by our medical consultant and are not processed until he has approved the regimen or worked with the prescribing physician to adjust the script to better meet protocol.

Case consultations and reviews emphasize the importance of DOT in conjunction with incentives. When DOT is not in place LHDs are encouraged to use alternate methods to monitor treatment adherence. During case reviews they are asked to provide detailed information on how they are ensuring treatment adherence.

Strong emphasis has been placed on monitoring for side effects for patients either on treatment for LTBI or active TB disease. The importance of such monitoring has been addressed in the guidelines for effective practice, the accompanying ETNs and in our regular case consultations and reviews.

Monitoring progress toward this objective will begin with data for year 2000 patients analyzed by March 2002.

**Goal 6: Drug susceptibility testing will be performed and documented on all initial TB isolates and repeated as clinically indicated**

*Objective 1:*

*Drug susceptibility testing will be performed and reported on the initial isolates of at least 95% of patients with culture confirmed tuberculosis.*

**Progress to date:**

Drug susceptibility results were reported for 100% (76/76) of culture-positive TB cases during 2000.

Basic information on drug susceptibility testing was included in the Accessing Services guideline. The Case Management guideline (which is now due out in the spring of 2002) will stress LHDs role in ensuring drug susceptibility testing is initiated immediately after identification of *M. tuberculosis*.

Given that drug susceptibility testing has been performed and reported on the initial isolates of 100% of patients in 2000 with culture confirmed tuberculosis, it is clear that statutory requirements to ensure susceptibility testing is being disseminated. During the MLN annual meeting information on this statutory requirement is circulated. At the 2001 annual meeting there will be a special session on susceptibility testing and emphasis will again be made on the statutory requirements.

**Goal 7: For each case of active TB, there will be documented improvement based on clinical, laboratory, and/or radiologic findings and documented adherence to therapy until completion.**

*Objective 1:*

*Summary data from completed cases will reflect care given and documented according to state and national objectives.*

**Progress to date:**

The development of the Case Management guideline has been moved to the spring of 2002. Information on working effectively with the laboratory was included in the Accessing Services guideline.

Quality assurance protocols will be included in a separate guideline. The date by which this guideline will be developed and distributed has not yet been determined.

Preliminary discussions within the Wisconsin TB Program and with the ALA/W have begun about the content for a staff-training curriculum to be used by LHDs.

Documentation from case reviews between the Wisconsin TB Program case manager and the LHD will reflect care given and documentation of cases' treatment "benchmarks."

*Objective 2:*

*By completion of therapy, 95% of active TB cases with pulmonary involvement will have documented:*

- *sputum specimen collections to verify culture conversion for patients with initially culture positive sputum,*
- *CXR improvement and*
- *interventions and evaluations of treatment adherence emphasizing DOT.*

**Progress to date:**

For all cases that listed pulmonary as the primary site of disease, excluding those cases that died, 94% had documentation (where applicable) of the above listed criteria.

The TB Program case management coordinator is responsible for providing consultation for tuberculosis case management to the nurse case managers in the local health departments. She checks for key clinical indicators by conducting periodic case reviews with local health departments. A specific concern about the medical management of any patient with tuberculosis is brought to the attention of the TB Program's medical consultant. Resolution plans are determined on a case by case basis.

*Objective 3:*

*By completion of therapy, 95% of active cases of extra pulmonary TB (including disseminated TB with no pulmonary involvement) will have documented:*

- *clinical improvement (includes surgical removal) and*
- *treatment adherence through completion of therapy.*

**Progress to date:**

For all cases that listed extra pulmonary as the primary site of disease, excluding those cases that died, 96% had documentation (where applicable) of the above listed criteria.

The TB Program case management coordinator is responsible for providing consultation for tuberculosis case management to the nurse case managers in the local health departments. She checks for key clinical indicators by conducting periodic case reviews with local health departments. A specific concern about the medical management of any

patient with tuberculosis is brought to the attention of the TB Program's medical consultant. Resolution plans are determined on a case by case basis.

### **Goal 8: Laboratory results will be reported promptly**

#### *Objective 1:*

*For at least 80% of initial diagnostic specimens received by a laboratory for TB diagnosis, the following laboratory turnaround times will be met:*

- *reporting of acid-fast examinations of specimens within one working day after specimen receipt,*
- *reporting of M. tuberculosis complex within 14 – 21 days from specimen receipt.*

#### **Progress to date:**

The 2000 MLN annual meeting was held on November 8, 2000. The annual meeting for 2001 will be held in Madison on November 8, 2001.

All 31 labs in Wisconsin that provide TB mycobacterial services are active participants in MLN. Representatives from 25 of the 31 labs were able to send representatives to the last annual meeting. All labs receive the monthly data report.

All labs contacted so far concerning the regional site visits have agreed to participate. WSLH made its first onsite visit to Milwaukee on July 9. Representatives from seven area mycobacteriology labs participated. Five other regional site visits have been scheduled for September and October 2001. These site visits are designed to allow representatives from 4-7 laboratories in a region of the state to come together and discuss mycobacteriology laboratory issues of common interest. During 2000, for initial diagnostic specimens received by the WSLH, 88% (1577/1802) of smear-positive or smear-negative results were reported within 24 hours. For initial diagnostic specimens received by WSLH, 89% (8/9) were reported as TB complex or not TB complex within 14-21 days of receipt in 2000.

This goal includes assisting the other MCN laboratories in measuring their turnaround times and assessing performance statewide.

WSLH stays informed of the latest technology through literature review and attendance at national workshops and scientific meetings and incorporates changes as warranted.

WSLH has recently updated all of its susceptibility tests based on National Committee for Clinical Laboratory Standards (NCCLS) recommendations. WSLH is preparing to offer DNA fingerprinting of TB isolates.

Mycobacteriology services are offered to LHDs through fee-exempt testing.

TB repository has been developed as of January 1, 2000. WSLH is validating TB drug susceptibility results of other labs in the state effective August 2001.

Laboratory capabilities are discussed at the statewide annual meeting and regional site visits.

Statutory requirements and internal laboratory quality assurance evaluations are discussed at the state-wide annual meeting.

WSLH will develop and conduct a questionnaire in 2002 to survey laboratory practices in Wisconsin mycobacteriology laboratories with reference to national mycobacteriology standards.

WSLH informs all Wisconsin mycobacteriology laboratories of changes in testing procedures and/or technology through MLN mailings, annual meetings, and site visits.

## **Improving Case Prevention Methods**

### **Goal 9: Stop the transmission of tuberculosis**

#### *Objective 1:*

*95% of persons reported with confirmed or suspected infectious tuberculosis will be placed in air borne precautions/isolation and started on an American Thoracic Society (ATS) approved regimen within three days of findings that establish TB suspect status.*

#### **Progress to date:**

Data collected from the TB Suspect Case Data form for 2001 TB cases will be used to determine statistically if this objective is being met.

In the fall of 2000 guidelines for effective practice on isolation and confinement preparedness were distributed to LHDs. ETNs on these guidelines were conducted at the end of 2000 and the beginning of 2001. Included in the Confinement Preparedness and Implementation guideline was information on the creation of memorandum of understanding (MOU) with local facilities for providing inpatient care.

The Wisconsin TB Program has changed the projected date for the distribution of an Outbreak Preparedness guideline to the spring of 2002.

In February 2001, the TB Nurse Consultant met with the Department of Correction's infection control committee to assist them in updating their TB control plan.

#### *Objective 2:*

*For each confirmed case of active TB disease in Wisconsin, an analysis will be performed to identify missed opportunities for disease prevention for the purpose of developing elimination goals.*

**Progress to date:**

The revised TB Suspect Case Data form is being used for all 2001 TB cases. Data will be analyzed by April 2002 and the algorithm to assign “in-state” and “out-of-state” categories of missed prevention opportunity will be developed at that time.

**Goal 10: Identify and treat newly infected contacts***Objective 1:*

*Contacts will be identified for at least 90% of sputum smear positive TB cases.*

**Progress to date:**

Contacts were identified for 92% of sputum smear positive TB cases in 2000.

The guideline for effective practice for Contact Investigation was distributed to LHDs in February of 2001. All of the time frames presented in the action steps listed here were incorporated into the Contact Investigation guideline. LHDs have been encouraged to adapt and implement it. During phone consultations with the Wisconsin TB Program, LHDs are encouraged to follow the guidance presented in the document.

There is no tool in place at this time to measure LHDs efficiency in interviewing index cases, testing contacts and initiating source case investigations. Information to assist LHDs in monitoring timeliness for contact identification, contact testing and source case investigation will be included in the quality assurance guideline (distribution date not yet established).

*Objective 2:*

*95% of close contacts to an individual with active TB disease of the respiratory tract will be clinically evaluated and tested within 3 weeks after being identified as a contact to the confirmed case.*

**Progress to date:**

In 2000, 67% (207/308) of contacts to pulmonary TB were examined within 3 weeks of date case started treatment.

Other than calculating the date of the skin test or chest x-ray and the date a patient initiates treatment for LTBI, there is no tool in place at this time to measure the timeliness of the medical evaluation of contacts. Information to assist LHDs in monitoring timeliness for the medical evaluation of contacts will be included in the quality assurance guideline (distribution date not yet established).

All the information in the Action Steps for this objective were included in the Contact Investigation guideline.

During case reviews between the Wisconsin TB Program and the LHD, the nurse case manager is encouraged to assure prompt medical evaluation of contacts and to submit

contact investigation information to the state as soon as possible after the completion of first and then second round skin testing.

Contact investigation forms are dated upon arrival – 2001 data will be analyzed regarding the timeliness of report submission.

*Objective 3:*

*Unless medically contraindicated, treatment of newly identified LTBI will begin for 95% of contacts < 15 years of age and 75% of contacts <sup>≥</sup> 15 years of age.*

**Progress to date:**

Treatment of newly identified LTBI, began for 75% (6/8) of contacts < 15 years of age and 79% (50/63) of contacts ≥ 15 years of age for cases counted in 2000.

The Accessing Services guideline included information on the Tuberculosis Related Medicaid Benefit and fee-exempt testing through WSLH for uninsured persons.

Several local health departments are becoming pilot dispensaries. These pilot sites will offer more comprehensive TB related services for both the under-insured and uninsured. This may facilitate prompt treatment initiation and greater completion rates for all individuals with LTBI.

*Objective 4:*

*85% of contacts started on treatment for newly identified LTBI will complete their regimen.*

**Progress to date:**

Contact data from 2000 on completion of therapy will be analyzed by March of 2002.

Semi annually lists of contacts on LTBI are sent to LHDs for review of data completeness. LHDs are asked to update any incorrect information. Annual completion reports are sent to each LHD.

The Accessing Services guideline included information on monitoring patients on LTBI treatment for side effects and adherence. It also included guidance on documentation and submission of forms to the Wisconsin TB Program throughout treatment.

*Objective 5:*

*The Wisconsin TB Program will evaluate all contact investigation information submitted and provide status reports to LHDs annually.*

**Progress to date:**

An evaluation and status report on the 2000 contact investigation information on contact follow-up was sent to local health departments in August of 2001 for their review. Completion of therapy information on 2000 contacts started on treatment for LTBI will

be collated next year. At that time a summary of statewide contact information for 2000 will be available.

### **Goal 11: Treat other identified infected persons**

#### *Objective 1:*

*For TB infected individuals identified outside of a contact investigation (e.g. work place screening, targeted testing, etc.), 75% of those placed on LTBI treatment will complete their prescribed treatment.*

#### **Progress to date:**

Data for this objective with 2000 data will be available by March 2002. See information under goal 10 objective 4.

### **Goal 12: Identify, evaluate and treat locally identified high-risk groups**

#### *Objective 1:*

*LHDs will identify populations in their jurisdiction at risk for TB disease and LTBI.*

#### **Progress to date:**

The Community Prevention and Control guideline to be developed by the summer of 2003 will provide comprehensive guidance on targeted TB testing.

Local health departments with few or no active TB cases in their jurisdiction may be ready to proceed with these control measures. The TB Program provides technical assistance to local health departments ready to implement this portion of the Strategic Plan.

One example is the Refugee Look-back Project conducted by the Appleton Health Department. In this project, 720 family charts, containing records on multiple family members, were reviewed. Charts were categorized as "active" (the family is currently receiving other Refugee Health Program services) or "discharged" (the family is not currently receiving Refugee Health Program services and less likely to be located). One thousand sixty-five (1065) individuals had either history of a positive skin test and needed verification of treatment completion or no documentation of a skin test and needed testing services.

The health department is focusing its efforts on the 757 clients with "active" charts, as they are most likely to be located. Of these clients, 111 with positive skin test history had documentation of receiving complete treatment and need no further follow-up. 232 clients had positive skin tests, but do not have documentation of therapy completion. 414 clients had no documentation of a skin test. The health department is currently focusing on the 232 clients with positive skin tests and no documentation of therapy completion. To date, the health department has identified and begun follow-up of 116 clients (50%). Documentation of therapy completion was located for 39 of these clients, 14 clients were considered moved out of state or lost to follow-up, 2 were located and referred to another

health department within the state, and 7 have completed evaluation by their physician. Medication for treatment of latent TB infection has been ordered for 6 of the 7 completing evaluation.

Another example is a project being initiated in the fall of 2001 with Vilas County Health Department and the Lac Du Flambeau tribal clinic (Peter Christensen Health Center). Contacts to active disease cases that were found to be test positive and failed to complete their initial course of medication will be re-evaluated and offered incentives to re-start and complete treatment for LTBI. The LHD and tribal clinic will offer a 2-3 month rifampin and pyrazinamide regimen given by directly observed therapy. To enhance patients' cooperation, the tribal clinic will employ a nurse who has worked with the native population in the area for years as well as a peer of the patients who has completed treatment for LTBI.

*Objective 2:*

*LHDs will promote evaluation of high-risk populations for TB disease and LTBI.*

**Progress to date:**

See examples given for Objective 1.

*Objective 3:*

*LHDs will promote treatment of populations at risk for LTBI and TB disease.*

**Progress to date:**

See examples given for Objective 1.

## **Improving Program Evaluation Methods**

### **Goal 13: Define and redefine process and outcome standards**

*Objective 1:*

*The Wisconsin TB Program and LHDs will write evaluation plans that include both outcome and process standards for all TB prevention and control activities.*

**Progress to date:**

This is the first progress report being issued on the 2000 – 2002 Strategic Plan. Another will be issued the summer of 2002. Some of the original time lines proposed have been changed.

The Strategic Plan contains objectives that will serve as a statewide performance evaluation plan. The quality assurance guideline that will be released in 2002 will serve as a template for LHDs' evaluation plan.

### **Goal 14: Measure performance toward meeting process and outcome standards**

*Objective 1:*

*Statewide and local performance related to TB matters will be measured through data management mechanisms.*

**Progress to date:**

The database is in use by 2 LHDs, piloting continues. 2001 data will be analyzed to evaluate results of the pilot program and determine further implementation.

**Goal 15: Analyze evaluation results and modify intervention and strategies to meet process and outcome standards**

*Objective 1:*

*The Wisconsin TB Program, WSLH and all LHDs will use evaluation results to improve their TB control programs.*

**Progress to date:**

The development of the quality assurance guideline (fall 2002) will be the first step in achieving this objective.